Abstract Submitted
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Jacobi – type identities and the underlying quantal algebra SAMIR LIPOVACA, None — Reference [1] introduced two identities written in terms of single commutators and anticommutators for any three elements of an arbitrary associative algebra where one is a consequence of other which is called the fundamental identity. From the fundamental identity a set of four other identities, represented in terms of double commutators and anticommutators is derived. We will show that three of these identities are in fact the defining identities of the quantal algebra. In this light, [1] did actually derive an underlying quantal algebra for an arbitrary associative algebra from the fundamental identity. Remarkably, the proof of the Theorem 2 showed that the existence of this underlying quantal algebra is equivalent to the associativity condition. A generalization to the super case of the quantal algebra is, in essence, derived in the section 3 of [1].

[1] arXiv:1304.5050v2 [math-ph]

Samir Lipovaca
None

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